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TRANSCRIPT OF PROCEEDINGS

Before the U.S. Nuclear Regulatory Commission:

Gregory B. Jaczko, Chairman

Kristine L. Svinicki, Commissioner

George Apostolakis, Commissioner

William D. Magwood, IV, Commissioner

William C. Ostendorff, Commissioner

APPEARANCES

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President and CEO, Wolf Creek

Tim Mitchell
Senior Vice President, Engineering and Technical Services,
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Ed Halpin
President, CEO, Chief Nuclear Officer, South Texas Project

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Bill Dean
Regional Administrator, NRC/RI

Victor McCree
Regional Administrator, NRC/RII

1 PROCEEDINGS

2 MR. VIRGILIO: Good afternoon, ladies and gentlemen. If you
3 could please take your seats. I know we do have some additional seats in the
4 front row. I'm really pleased to see the size of the crowd, the level of participation
5 and interest in today's session. My name is Marty [spelled phonetically] Virgilio.
6 I'm one of NRC's deputy executive directors for operations. I have the
7 responsibility for the operating reactors, the new reactors, and the security and
8 emergency preparedness organizations here at NRC. As we get started, what I'd
9 like to do is just have a few housekeeping reminders with respect to your cell
10 phones and PDAs and electronic devices. If you could put those into the silent
11 mode and if you have to leave the session before we're finished, please extend
12 the courtesy of allowing the speaker that is currently speaking to finish. We do
13 have evaluation forms. I think they've been provided on each of the chairs. So, if
14 you could please fill those out, we would appreciate the feedback and I just
15 wanted to note in this session, it's going to be a little bit different than what we've
16 done in some of the other sessions. Instead of waiting to the end, we're going to
17 have an opportunity for you to ask questions to the presenters as each of them
18 finish. So, if you've got questions in mind, you might want to fill them out quickly
19 so that we can get them to the individuals that are making the presentations.

20 I'm really pleased to have with me the four regional administrators
21 who will be participating in this session. Elmo Collins will be speaking from the
22 regions first. He's our Region IV Regional Administrator and then we'll go on to
23 Mark Satorius. Mark is from Region III. Bill Dean will then speak. He's speaking
24 on Region I and then Victor McCree from Region II will also then speak. I'll talk a
25 little bit about what they're going to be talking about in a moment.

1 In terms of introductory remarks, I just wanted to note that if you
2 were at the plenary session, the first plenary session this morning where Bill
3 Borchardt spoke, you'll recognize some of the slides I'm about to present. Bill
4 noted in his presentation that in 2010, we really didn't see any statistically
5 significant trends in overall industry performance and that none of the indicators
6 exceeded the short term prediction limits that we had established at the
7 beginning of the year. Nonetheless, what we did see was an increase in the
8 number of scrams. We did see an increase in the number of significant events
9 and we did see a number of -- an increase in unplanned power changes per
10 thousand hours critical and I'll go over some of that information in a minute. And
11 that triggers us to closely monitor this performance to see if there are trends or
12 patterns and I can recall days back in the early 1980s when NRC first embarked
13 on developing performance indicators. We knew there and then that we weren't
14 going to find that holy grail, that indicator that told us everything we wanted to
15 know about the safety performance of the facilities. We recognized then that
16 what we had was flags that would point you in a direction where you needed to
17 do more evaluation and I just give you that as we start into some of this data.

18 As Bill projected this morning, what we're seeing is, although the
19 number of scrams are still below the upper bound prediction that we'd
20 established at the beginning of this year, there's been an increase in the number
21 of automatic scrams in each of the last two years and you can see that on this
22 chart. Bill also projected this chart which is the number of significant reactor
23 events. The large jump in 2010 does include some double counting because
24 we're dealing with multiple unit sites. But if you back out the double counting
25 what you're still going to have in front of you is an increase in the number of

1 significant events higher than what we've seen in the past four years. So what
2 does that mean to us? That means that we're doing more inspection follow-up
3 activities to understand the whys behind why these events are occurring and
4 what we're seeing is a somewhat disturbing pattern with respect to human
5 performance: human performance and human errors that either initiated or
6 complicated these events and what we're trying to peel back the onion to the next
7 layer and some of what we're seeing, and we're still not set on some of this, but it
8 is starting to point to issues involving training and qualification of the staff. It is
9 starting to point to knowledge management concerns and the transfer of lessons
10 learned from the early operating history we have in this country and with this
11 industry worldwide failing to translate that information successfully to this next
12 group of operators or the current fleet of operators. Vic [spelled phonetically] is
13 going to touch on this in a little bit more detail.

14 The next indicator that I wanted to point to is the unplanned power
15 changes. This performance indicator is shown to us to be a good -- to have a
16 good correlation with plant performance and it was considered and still is
17 considered a leading indicator for us.

18 Finally, not really a performance indicator but something we keep
19 an eye on is the number of plants in our action matrix columns, particularly in
20 columns three and four and during fiscal year 10 there was a large increase in
21 the number of plants that entered column three and we all took notice of this and,
22 although the number did sort of tail off toward the end of the year, it still -- it gives
23 us pause to consider overall industry performance and so we're monitoring this
24 change in the status of the plants as they move to the right hand side of the
25 action matrix columns and we're looking to see, again, if there are any common

1 themes or any explanation to the performance anomalies.

2 So, our session topics today; we're going to look at NRC's
3 programs for assessing and understanding operational experience and Elmo
4 Collins will lead that discussion. We'll talk about performance issues at
5 independent spent fuel storage facilities. Mark Satorius will lead that session.
6 Security performance findings and trends; Bill Dean will lead that. And insights
7 on operating crew performance; Vic McCree will do that. And we're eager to
8 hear your feedback and insights with regard to our observations of industry
9 performance and answer any questions that you might have as well. So, with
10 that, let me turn this over to our first speaker, Elmo Collins.

11 MR. COLLINS: Thank you, Marty. What I'm going to touch on --
12 this -- my objective is to stimulate thinking, perhaps some comments and
13 questions on your part, and to raise your awareness on some of the activities that
14 go on inside the NRC.

15 Industry trends program; you've seen some of the charts from that
16 already this morning in the plenary session and from Marty here. That program
17 began in 2001. This was -- this is an endeavor on the part of the NRC to pay
18 attention to the industry from an industry perspective on how things are going,
19 what are the issues, what are the trends in performance as indicated by a
20 number of indicators, primarily scrams, significant events. You've seen both of
21 those charts already and also safety system functional failures. I would just ask
22 you to keep in your mind the distinction between industry performance and what
23 the reactor oversight program says. The reactor oversight program looks plant
24 by plant by plant by plant by plant. The industry tries to take all the information
25 and accumulate it and speak to how the industry performs. Of course, we all

1 know, industry performance is not industry performance. It's really the
2 accumulation of whatever the individual performance is for 104 operating nuclear
3 power plants and so it's not ubiquitous. It's not uniform and I think we'll talk a
4 little bit more about that.

5 The action of sequence precursor program; this one's been around
6 a long time since 1979. By the way, the industry trends program and the
7 accident sequence precursor programs have annual reports which are produced.
8 We review them, consider the results in the agency action review meeting every
9 year as part of our oversight process to ask ourselves, is there anything that this
10 data shows that we need to change? So they become publicly available and you
11 should feel free to get those and review them.

12 The action sequence precursor program was 1979, risk-informed
13 view of industry performance. It classifies significant accident sequence
14 precursor events. That's a conditional core damage probability of 10 to the
15 minus 3. We don't have very many of those. That's a good thing. Since the
16 program -- they calculated back to 1961. There have been 34 significant
17 accident sequence precursor events in the industry. Some kind of a rough
18 average: once every five years -- the last one in the nuclear industry was Davis-
19 Besse and you should note that the Robinson is still under review. So, we do
20 ask -- we do ask ourselves -- we want to identify adverse trends. This industry
21 trends program speaks to that the trend is kind of long. It's about 10 years so
22 you got to keep that in the back of your mind when you try to understand the
23 meaning from the charts and when you see a line going down, that's a good thing
24 but then it's not something to necessarily take comfort from. I think that's what
25 we're seeing with the scrams.

1 Did I make this thing go off or what? What did I do? Did I hit the
2 wrong button? I apologize for messing up the machinery here. Is there someone
3 that can provide me some assistance?

4 [laughter]

5 Pardon? [inaudible] Okay, we'll just go through verbally. Some of
6 the graphs are a little insightful and I'm not going to be able to say what I wanted
7 to say. On the operating experience program, the third bullet on that slide, you
8 can pull it off the Web if we don't get to show it again here but there's -- the NRC
9 has -- after Davis-Besse we undertook a very focused effort to strengthen our
10 review and assessment of the industry operating experience and what came out
11 of the program which results -- it's basically a systematic, real-time, ongoing
12 assessment of operating events across the industry and it happens every day
13 with information that comes in every day from the regions, from LARs, from
14 incident reports; wherever we get our sources of data, it goes through what we
15 call a clearinghouse and it's a very active program and from there a number of
16 things can happen with that information. To process it, we can issue industry --
17 we can issue internal communications, they can result in industry generic
18 communications, it can be farmed out through a -- for a more systematic review
19 as an issue for resolution. We have set up -- I don't know how many now --
20 roughly three dozen or more. We call them technical review groups inside the
21 agencies to look at the issues from a technical basis, systematically, and they
22 produce a report every year as well. And so it's quite a large amount of effort on
23 our part. It's not what the old office, AEOD, used to do but it does give us what
24 we think is a pretty rigorous program.

25 One of the things they have done recently is undertaken a review of

1 inspection findings for the last couple of years. One insight that came out of that
2 was the percent of findings. It had as a contributor not properly using or
3 understanding vendor recommendations. The percent of findings has increased
4 from five percent to 30 percent that had that correlation to it and that has our
5 attention. We don't know what that means especially, but that is something to
6 think about. The other thing that caught our attention in that review was seeing
7 problems again and again at the same site and even to the extent that in some
8 cases problems that the licensee had -- you had identified in your corrective
9 action programs weren't being effectively resolved and they had contributed to
10 the findings.

11 So, at this point in time, I would be going to a graph.

12 [laughter]

13 So, you've seen the scrams graph from the industry trends
14 program. You saw the data for 2009 was one number, right? It's a little hard to
15 meaningfully characterize industry performance in terms of one number. We
16 know that scrams in the last four or five years have tended to increase. Here we
17 go. We're almost ready to run. I don't think that's news to anyone, so they're up.
18 There's kind of this upward movement in the number of scrams across the
19 industry. I refrain from calling that a trend since I will be disciplined and define
20 trend as defined by the industry trends program and you can see that has not
21 identified that as an adverse trend. So, I think -- we've got some backup slides
22 here somewhere.

23 Here's the slide for the operating experience program. You can see
24 the inputs and the outputs for that. You can peruse that at your leisure. Here's a
25 little bit of data on scrams: a couple of points there. You can see the last four or

1 five years the numbers are going up. It was interesting to note that 2009 manual
2 scrams exceeded automatic scrams and that's the first time that that had ever
3 happened. That did not continue in 2010.

4 But industry performance; I thought it would be interesting to look at
5 the distribution of industry performance and we use data from the reactor
6 oversight Web page. You can take this data. This is a little busy graph. Now
7 just take a look at it. This is a histogram, the number of plants and what number
8 they're reporting every year. So there's not much overlap in this data, to take a
9 look and see what's going on and there's a suggestion I would just offer to you
10 that once, no scrams -- this first column are the number of plants with no scrams
11 in the year. That's steady. That has been steady for the last four or five, six
12 years, the number of plants with no scrams. What's not steady is you see, this is
13 sloped down a little and there's a hint here, out here where you don't want to be
14 of going up and then, of course, a few more here and here and so there's a
15 suggestion that the industry distribution is changing and actually expanding
16 according to the scrams. So, like I said, industry performance is not, you know.
17 There's a segment of population of plants. It's a minority but, nonetheless, who
18 are experiencing difficulties and just to check this, we did a variance, just a
19 straight variance of the data and there is a suggestion here that the variance is
20 going up the last years for scrams and with this type of distribution there's only
21 one direction that can go. And so there's this hint, this upward pressure,
22 something going on in the industry.

23 So, here's another graph, chart, histogram which includes column
24 two facilities, as well as column three and four. I don't know what insights --
25 there we go. Did I do it again? I'm not sure I'm doing this right but -- okay, I

1 apologize for my lack of proficiency.

2 The director oversight program looks plant by plant so we can look
3 at industry and then compare it to the individual plant results to see what it's
4 telling us. With the significant events, Marty's already spoken to that. There are
5 nine events. Eight of them were inspection findings, that meets the definition.
6 Bill Borchardt alluded to it a little bit, that the three yellow findings at two different
7 sites. That's six and then two other yellow findings and then the Robinson event
8 was one as well.

9 In terms of oversight, one of the results of the oversight program --
10 you can kind of see. You know, there's little -- this -- the blues; that's kind of flat
11 in column one. Maybe we would expect that. Column two; there's more now
12 than what we've seen. Of course, we haven't seen -- there's none in column
13 three and none shut down right now and just to keep things in perspective, the
14 oversight program says all plants are operating safely.

15 With that, ROP results with respect to scrams because at some
16 point it will drive NRC engagement. Nine units in the last three years were
17 greater than two scrams, which is not engagement for ROP but five of those nine
18 were engaged in the ROP, therefore, scrambled for another reason so there's a
19 hint there about performance associated with plants that tend to have more
20 scrams.

21 With that, I just want -- so that's just some of the data and what
22 we're seeing. I'm going to, I'm going to have a couple of comments from an
23 industry perspective and then open up for questions. I'm doing alright on time?
24 Marty's got a stopwatch running. I think I'd like to start with, find a microphone.
25 Matt, if you would?

1 MR. SUNSERI: Thank you, Elmo. Is this on? Matt Sunseri
2 [spelled phonetically], Wolf Creek. I'd just like to comment. Wolf Creek is one of
3 the plants that has been engaged because of the number of scrams that we've
4 had in the last two years. If you look at our performance, we've had scrams that
5 exceeded the threshold for the white performance indicator. In addition to that,
6 two of those scrams, our feedwater system was not available. So, those were
7 with a complication. That gave us a degraded cornerstone, put us in column
8 three.

9 When we look at the primary reasons behind that, it was because
10 of weaknesses in our preventive maintenance program but if you really ask the
11 second question why and take that deeper, we had weaknesses with our
12 decision-making: some of the conservative decisions we did or didn't do with
13 respect to the PM program, operating experience, not applying some of the
14 things that we learned and that affected our ability to produce good quality
15 evaluations in that area. As you know, those are safety culture elements that we
16 are working on. I'm happy to say that we're seeing improvement across the
17 board but if I were offered a one piece of advice from an industry perspective I
18 think that the initiative that the industry has working with the NRC on the safety
19 culture and how to evaluate that effectively and systematically. We're looking at
20 that very carefully at Wolf Creek and applying those principles and that's going to
21 help us going forward. So, whether it's weaknesses in your preventive
22 maintenance program or weaknesses in some other aspect of your performance,
23 I think this safety culture initiative, the way the ROP helps you point that out, is a
24 benefit.

25 MR. COLLINS: Thank you. Tim.

1 MR. MITCHELL: Tim Mitchell [spelled phonetically] with Entergy
2 [spelled phonetically]. Hopefully I'm standing close enough. At Entergy we've
3 also recognized these trends and especially with scrams and significant events.
4 So, we've taken action to make sure that we are focused upon worker behaviors
5 and internalizing the principles of the strong safety culture to prevent these type
6 of issues, as well as to be focused on continuous improvement in the future. So,
7 we've done a number of things in order to make sure that we reinforce that,
8 including stand downs, assessments, ongoing assessments, and improvements
9 and observations going forward. So, with those actions, we are trying to lay the
10 foundation for a back to basics or a fundamentals approach to ensure that our
11 workers and our management teams remain focused on continuous improvement
12 going into the future.

13 MR. COLLINS: Thank you, and then I think one more comment
14 and then we'll open it up for questions. Ed Halpin [spelled phonetically].

15 MR. HALPIN: I'll do a little mic adjustment here, Elmo. Ed Halpin
16 from South Texas. Thank you. I think Tim's comments were right on in regard to
17 back to basics as an industry. We've recognized that there have been some
18 declining trends so we're working very carefully together with INPO [spelled
19 phonetically], trying to focus on back to basics and on critical thinking. That said,
20 Elmo, I would point out that I think, as an industry, we are in a very unique time
21 period here with -- we've had success for many years. We've had people at our
22 stations that have operated for 20 plus years with success. So, we're fighting the
23 issue of complacency, right? What happens each and every day is important. On
24 top of that, Marty mentioned it in his comments as he opened up. We have new
25 people that are coming in and this issue of knowledge management, knowledge

1 transfer is key to the industry. So we have to focus on both fronts.

2 MR. COLLINS: Thank you. I really appreciate Ed and Matt and
3 Tim for making the comments and with that, I think [inaudible] open it up for other
4 questions or comments, if any one so desires. I left a little bit of time.

5 MR. VIRGILIO: Okay, Elmo, thank you very much.

6 [applause]

7 MR. SATORIUS: Thank you. I'm Mark Satorius, the regional
8 administrator in NRC's Region III. Elmo, could you tell me what button you are
9 pushing so I'll not do that button?

10 [laughter]

11 [inaudible]

12 I decided that -- I outreached to a number of my licensees when we
13 were searching for topics that would fit into this operational type envelope that
14 we've decided to focus this breakout session on and got one from a licensee on
15 istasee [spelled phonetically] operations and I know that istasee operations both
16 the construction of pads and then the initiation of the first campaign and then
17 subsequent campaigns has kept our inspectors very, very busy. It seems like
18 every facility in Region III at least is either constructing a pad or carrying out cask
19 [spelled phonetically] campaigns and as we have seen this increase in effort and
20 increase in work in this area, we've seen some trends, both in Region III and the
21 other regions that we've outreached with on some issues. And these issues are
22 kind of -- and Marty kind of teed up issues that I heard well. These are issues
23 that talk about training and knowledge management and standards and these are
24 relatively simple and safe storage facilities that once you get them loaded and
25 out on the pad, there's no moving parts. But it's fuel. That's the thing that I focus

1 on. It's fuel with a lot of curies in that fuel and they need to be safeguarded. And
2 we have seen a number of issues, what I'll call preoperational, and then
3 operational nature. So, I've just got a couple of slides here and I don't want to
4 kind of tick off a litany of inspection findings but I do want to kind of outline some
5 of the areas that we're seeing some challenges in an effort to kind of spur some
6 comments and so that we can get some dialogue going.

7 So, as far as preoperational performance, three general areas:
8 requirements for spent fuel cask stability during transfer, control of heavy loads,
9 evaluation for cask movements and istasee pad evaluation construction. And for
10 the first bullet, I'll talk about what basically many of us refer to the stack up or the
11 tip over requirements and real quickly, what that consists of is as you take a
12 transfer cask that has the canister with fuel loaded into it and it's already vacuum
13 dried and it's basically ready to go, you sit it on top of the storage cask and then
14 you have to drop one down into the other and then the storage cask is taken out
15 to the facility. There's a time period in there where you have to -- you're not able
16 to support the transfer cask with the single safety free crane so you have to
17 support that during seismic events and there were some issues as to whether
18 that was required and our reviews of the cask -- this is for horizontal casks, the
19 casks FSAR [spelled phonetically], a number of inspectors came to the same
20 conclusion that you have to take into account seismic events that could occur
21 while that transfer cask still has a canister inside of it and before it's moved into
22 the storage cask. So and I see I've already got -- somebody cheated and I've
23 already got a question for that very matter before I've even given my
24 presentation.

25 That issue is being resolved and actually, Eric, you can help me

1 here, but it is resolved now and that information will be shared probably this
2 week. Is that an accurate -- and I believe the cask vendor has been informed of
3 the program office's decisions on how that needs to be dealt with, so the answer
4 to that question is we've moved forward, and we'll be able to provide clear
5 guidance on that matter.

6 The second issue in this stability is also -- we had a number of
7 concerns associated with the technical rigor of licensee calculations
8 demonstrating seismic stability within either the fuel building or the reactor
9 building, depending on whether it's a boiler or a PWR. Control of heavy loads for
10 cask movements is the next general area of pre-op. Legacy calculations for
11 moving of heavy loads were -- some of them were incorrect; not in alignment with
12 the as-built structures. A lot of times these are calculations that really haven't
13 been reviewed until you get to the point where you need to move these heavy
14 loads with inside, either the, like I said, the reactor building or the fuel building.
15 And then licensees in some cases were found to not be in compliance with codes
16 they were using to demonstrate that the crane was single failure proof.

17 And the last preoperational issue involves istasee pad [spelled
18 phonetically] evaluation and construction. And there are a number of examples
19 that have been identified throughout the four regions where licensees failed to
20 follow code requirements, specifically for areas associated with concrete
21 placement and differential settlement, out-of-plane [spelled phonetically]
22 flexibility, and those type of matters. And another one where they failed to -- a
23 licensee failed to build a pad in accordance with design specs primarily
24 associated with rebar placement within defined tolerances.

25 So those are the areas that we saw from a pre-op perspective.

1 Going into operations, command and control of istasee operations is an area that
2 we saw a number of problems. And one of them involves training, and that's
3 where we get back to kind of the link to Marty's point. The workers are, for the
4 most part, trained to operate equipment associated with istasee operations. But
5 it doesn't appear that they're really trained to recognize when systems are out of
6 their design bases or within the constraints of those designs. So they're
7 oversimplified; they're kind of given a cookbook and told how to work it, but
8 there's nothing in the procedures for contingencies, that if a crane load cell
9 [spelled phonetically] would cause the crane to stop operating, there we sit with a
10 suspended load while we figure out what we're going to have to do with it. So
11 that's an issue that we've seen on a couple of occasions.

12 A lot of sites that rely heavily on contract technical experts [spelled
13 phonetically], [unintelligible] the cask vendor. Many sites do not have an istasee
14 system engineer, and the project managers that are associated with these
15 projects within the licensees' organization are not normally that familiar with cask
16 design and licensing basis. The project manager, which is okay, needs to
17 outreach to the cask vendor for more specific information to provide answers to
18 NRC inspector questions during the operational phase. And then a lack of
19 communication and involvement, oftentimes from on-site organizations. What we
20 find here is normally -- or a lot of times, engineering is not consulted during the
21 procedure creation -- on-site engineering. And they're -- a lot of times,
22 operations, we have seen, is not as aware of istasee operations as they should
23 be, and -- unless they actually impact the operating plan. So there's not really an
24 operations-led focus on istasee campaigns; often they are left to the contractor
25 and other folks, either on the refuel floor or in the spent fuel building.

1 Adherence to system design and licensing basis. There was an
2 instance where a cask was -- or a canister was left in a cask overnight with
3 cooling applied to the annulus [spelled phonetically] on the transfer cask. And in
4 this particular case, ops was not checking on the cooling system; the cooling
5 system tripped offline and temperature rose within the cask -- not beyond limits --
6 but still not indicative of the type of oversight that I would expect to take place
7 inside a Part 50 structure. Another instance at a facility where when the water
8 was being drained out of the cask, you backfill with helium in this case; it was
9 instead backfilled with nitrogen, so the facility found itself outside of its design
10 basis by using the wrong fill gas.

11 Istasee casks, pad construction, and transient combustibles. We
12 see a number of pads that are designed to certain blast pressures and fires, and
13 licensees are frequently storing materials on the pads without evaluating either
14 their blast or their fire potential. And then lastly in this area of system design,
15 there was an example where, at a facility, a canister was isolated while it was
16 filled with water and because of heat up of the fuel, there was an overpressure
17 condition. It did not overpressure the canister, but again, an attention to detail
18 issue.

19 And then the last area within the operational performance issue
20 would be equipment failure during cask heavy load operations. There was an
21 issue at one facility where on the horizontal system, the transfer cask was set on
22 what's called a "mating device," which allows the transfer to take place from the
23 transfer to the storage cask. And the alignment was not right, and when the
24 canister was attempted to lower, it hung up and triggered a load cell problem. So
25 all stop and turn around and deal with that. And that was one where we found

1 where those contingencies were not necessarily dealt with well within the
2 procedures.

3 We've had several cases where vertical cask transporters have had
4 problems, either on their way to the pad or at the pad. One from several years
5 ago, the transporter was out of service for several weeks, and with the cask
6 suspended and had to be cribbed. So there have been, I know, problems with
7 the vertical cask transporters, as well as the horizontal cask transporters where
8 one instance, because of a modification that was made, a hydraulic system was
9 not analyzed properly such that the reservoir for the hydraulic fluid was
10 undersized, so they were only able to ram the cask -- replace the horizontal cask
11 about halfway in, and they ran out of hydraulic fluid. And of course, then they
12 had to deal with the high rad area and work around that. So, again, an attention
13 to detail issue.

14 And with that, I'm going to ask Tim Hanley from -- who's the
15 Dresden site VP, to provide an industry perspective, if you would. Tim, thank
16 you.

17 MR. HANLEY: Thanks, Mark. You know, Exelon's [spelled
18 phonetically] had dry-cask storage for a number of years at a number of our
19 sites, including Dresden, but our recent efforts to install dry-cask at some of our
20 other facilities have presented some challenges and some significant learnings
21 for us. So what I really wanted to do, for those site vice presidents that are
22 looking forward to dry-cask storage at their facilities, you really need to challenge
23 your organization in a number of these areas to make sure you're fully prepared
24 to do that. And the first thing I'd say is you really need to communicate with the
25 regional inspectors and management early and often; keep the lines of

1 communication open, particularly if there are scheduling issues, because as
2 Mark said, their resources are stretched and if your dates change, that throws off
3 their inspection. And it just makes it easy to keep the lines of communications
4 open.

5 The second area is you have to make sure that your staff has a
6 good understanding of the differences in the design and licensing basis between
7 Tensia [spelled phonetically] Part 50 [spelled phonetically] and 72 and how they
8 interact.

9 The third thing is you have to make sure that your vendor quality is
10 what you expect from them, because ultimately, you're responsible for it, so you
11 need to use all your technical human performance tools and not be over-reliant
12 on the vendor; make sure you have the questioning attitude from your vendor,
13 that you can answer those questions when they come up.

14 Then the final thing, which Mark touched on earlier, is that you have
15 to make sure that it's not treated as a one-off project, but it's really integrated into
16 the entire site, that the significance of handling irradiated fuel and the storage of
17 it should be treated like it's a day-to-day operation of the plant, just like operating
18 the reactor. Thanks.

19 MR. SATORIUS: Thanks, Tim. And I have a couple of questions
20 here, if there are any more, because I'll burn through these pretty quickly. One I
21 think I already answered, not an operational issue exactly, but do you see
22 resolution to the stack up issue for the dry-cask loading campaigns? And I think
23 my answer to that is yes, and it should be able -- should be communicated
24 publicly this week.

25 Another one, if we are loading casks in a region other than Region

1 Ill, should we stop and evaluate tip over? Yes.

2 MR. VIGILIO: Any other questions for Mark? All right, great.

3 Thank you very much, Mark.

4 [applause]

5 MR. DEAN: Good afternoon, I'm Bill Dean, the regional
6 administrator from Region I. We're a little bit ahead of schedule, so Victor asked
7 me if I could take a little bit longer with my presentation so he wouldn't have to
8 answer as many questions as he might get, being the last one to present. But I'll
9 do my best, Vic.

10 I'm going to -- you know, those of you that attended the Plenary
11 Session this morning heard Commissioner Svinicki talk about her affinity to music
12 and trying to develop some themes, and I'm going to talk to you about some
13 trends and security findings, which I was going to look for a song that provided a
14 theme, maybe it'd be Simon and Garfunkel's "Sound of Silence," because we
15 don't talk about security trends very much publicly, and that's a outfall of the
16 events of 9/11 and our efforts to try and sort of segregate security findings in
17 terms of national security interests. I think, hopefully, in the future you'll see,
18 potentially, a remerging so that we don't have these parallel assessment
19 programs in security and safety. And hopefully in the next couple years we'll
20 come to that point where we're able to do that.

21 What I'm going to talk about to you today is trends in security
22 findings. And I'll start off by stating the fact that before I took over as a regional
23 administrator in October of last year, my prior job was the deputy office director
24 of the Office of Nuclear Security and Incident Response. But I want you to
25 understand that there's no correlation between that job and the fact that we've

1 seen an increase in security findings in Region I; absolutely no correlation.

2 [laughter]

3 But we have seen a notable increase in security findings -- or
4 security findings of potential significance, let me be more specific; potential
5 significance in Region I, and we'll talk a little bit about why that may be.

6 If you look at 2008 and 2009 in Region I, we had a total of 55
7 security findings of all variations, green and more, of which only four of those, or
8 about seven percent of those findings were ones of significance greater than
9 green findings. In 2010, we had 20 security findings. Of those, four of those, or
10 25 percent, of the security findings in one single year were considered to be
11 greater than green. Additionally, if you look at the last eight months or so, we've
12 processed 11 potential findings of significance. Now, not all of those ended up
13 as findings of greater than green; some of them were eventually characterized as
14 green findings. But the fact that we are processing, at least in Region I, more of
15 our security findings as ones of potential significance is a change in the trend.

16 And these findings have been associated, really, with three major
17 areas: the control of safeguards information, vehicle access and personal
18 access, control point searches, and what we call unintended opening -- security
19 openings, which are potential entries into the plant that are not the access
20 portals, but perhaps somewhere where somewhere around the perimeter of the
21 plant there might be a place where somebody could potentially get access into
22 the protected area with not being detected.

23 And so the findings that we're having generally migrate into those
24 three areas. And it's not just one or two licensees: out of the 16 sites in the
25 region, these 20 findings last year were at nine different sites representing five

1 different utilities. So it's fairly broad-based, it's not something that we can tie to
2 one single or two utilities, or a single plant, or a couple plants; it's a fairly broad-
3 based perspective. So that's what we've seen in Region I.

4 So having seen that, I was interested in understanding, well, what
5 might be going on nationally. And so, in doing outreach to our counterparts in
6 the regions, they too are seeing, perhaps not to the same degree as Region I is
7 seeing, but they are seeing an increased number of security findings that are
8 getting evaluated and processed at least as potentially greater than green
9 findings, not that they always turn out as greater than green, but we are seeing
10 that.

11 And I want to offer to you, there's potentially four possible causes of
12 this, at least from my perspective. And one is, as you all or many of you know,
13 we made a significant change to the security rule a couple years ago; March,
14 matter of fact, two years ago, March of 2009. The revised 73.55 [spelled
15 phonetically] rule-making -- security rule-making for power reactors went into --
16 was finalized with an implementation date of March of 2010. So I think what has
17 transpired is that a lot of utilities had to make modifications to security systems in
18 order to be in compliance with the new rule. A number of facilities, because of
19 the extent of the modifications that had to be made -- and many sites, fairly
20 substantial modifications -- asked for exemptions to the compliance date for the
21 rule because they were going to spend several years probably doing these
22 significant modifications.

23 And so what really I think has transpired in some respect, at least
24 as it pertains to safeguards information control, is that we were utilizing a lot
25 more of the safeguards information, which typically is locked up in safes and so

1 on, because we had active projects that were going on, plus developing more
2 safeguards information because of new systems, so you have schematics and
3 drawings; so a lot greater use of safeguards information. And many times, by
4 individuals that probably were not as used to handling safeguards information as
5 you might find in a security organization. You might have had engineering,
6 because they were involved in design modifications and so on; corporate offices,
7 you know, the corporate offices might have been handling safeguards
8 information. So there was certainly a much great potential, as you will, for
9 mishandling of safeguards information, because of what I believe to be a broader
10 scope use of safeguard information on an ongoing basis.

11 Secondly, another contributor -- and it's somewhat related to the
12 first factor -- is the use of portable electrical media, laptops and so on, for
13 capturing and retaining and sharing and utilizing safeguards information; thumb
14 drives, portable laptops, these things are easy to use, they're easy to move
15 around, easy to use to share information. And so, you know, I think that in some
16 of the instances that we've seen in terms of handling the safeguards information,
17 a lot of times portable electrical media -- electronic media were involved in the
18 issue. And so you have to really be conscious of the fact that because of its
19 ease of use, its portability, that if there's some degree of complacency or
20 lackness [spelled phonetically] in terms of security controls for safeguards
21 information using that type of media, you're potentially setting yourself up for
22 mishandling and loss of safeguards information. And there's a number of events
23 that have occurred over the past year or so where that has indeed has
24 happened.

25 A third item is at the beginning of 2010, there really was a notable

1 change in the security portion of the reactor oversight process, and that was a
2 development in rollout of the new significance determination process, or SDP, for
3 physical protection. And this significance determination process was several
4 years in the making, and it was done in conjunction with industry in terms of
5 trying to address some of the issues that existed with the prior version of the
6 significance determination process: its clarity, its predictability, its subjectivity.
7 And so this new significance determination process really was designed to help
8 address prior concerns and issues with the prior version of the significance
9 determination process. And in doing that, we integrated into the screening
10 process some of the things that were weaknesses from lessons learned and
11 observations that we've had from the prior five or six years of inspection. And
12 one of them was the area of control of safeguards and mishandling of safeguards
13 information, and the fact that the previous SDP did not really treat that sort of
14 issue appropriately in our minds. And so that was one area that was an area that
15 needed some representation.

16 And then the other one that is of significance is the fact that, with
17 the lack of predictability associated with the previous significance determination
18 process, we needed to be able to look at issues that occurred in search trains,
19 whether they be vehicle or personal access. We felt that the prior significance
20 determination process has some weaknesses in that issues where there might
21 have been the potential with contraband potentially getting into the search train
22 area were not being adequately dealt with with prior significance determination
23 process. And of course, my earlier comments about where we're seeing a
24 significant number of these issues of potential significance occur, two of them are
25 in the areas of safeguards information control and the access screening issues.

1 The last point that I wanted to make is associated with the issue of what we in
2 the security area call "unintended openings." And basically, as I mentioned
3 earlier, these are potential areas of ingress into the protected area -- protected
4 area of the plant -- that if they aren't properly monitored, if you don't have
5 adequate surveillance or detection controls, could potentially provide a point of
6 ingress into the protective area.

7 And so it's an area that has gotten a lot of emphasis by the NRC
8 over the years. We had security orders back in 2002. There was a regulatory
9 issue -- summary issued in 2005, security advisory issued in 2009, all talking
10 about these security openings, unintended openings, and some of the issues that
11 we've seen and tried to give industry the intel, you know, from an operating
12 experience point of view, that this is something that needed focus.

13 And in response to that, industry has actually developed their own
14 guidelines -- which the NRC has reviewed and approved -- associated with these
15 unintended openings that was issued late last year. And so we have a fairly
16 substantial history of communications on this issue; industry, recognizing the
17 issue, has developed their own internal guidelines for application and use that
18 the NRC has approved. So, it's my expectation that we'll see fewer of these
19 issues in the coming years but they have been something that have occurred
20 with some degree of regularity over the past several years that have given us
21 some pause in the NRC.

22 So, those are my prepared remarks. Mike Pacilio [spelled
23 phonetically] of Exelon, who is the chair of industry's Nuclear Security Working
24 Group, was actually going to provide a few comments. Mike?

25 MR. PACILIO: Thanks, Bill. As you know, while chairing the NEI

1 Security Working Group, Bill, we also took a look at this uptick in security
2 violations in Region I along with your recent promotion from deputy director of
3 Nuclear Security.

4 [laughter]

5 We also think this is purely coincidental.

6 [laughter]

7 It's true. Yeah. No, we agree. No, and on a serious note, this
8 increase or uptick in SGI -- the industry is taking this very serious; we're taking
9 some immediate corrective actions. All the nation's power plants are doing quick
10 check-ins on their controls for SGI, using NEI guidance. We're sharing lessons
11 learned in a workshop that we have planned in May. And then we're rolling those
12 good practices that we learned from that workshop into the NEI governance
13 document. And then we'll do additional check-ins, toward the end of the year, to
14 ensure proper implementation of those best practices. Thanks, Bill.

15 MR. DEAN: Good. Thank you, Michael. I have a couple more
16 questions here. I actually may rely on some of the [unintelligible] management
17 team that are in the audience here to help me answer these. This first question
18 is, is there an active effort underway to look at how to better risk-inform the
19 current significance determination process for unintended safeguards
20 information? For example, by developing different levels of SGI with graduated
21 treatment in the significance determination process, based on actual value to a
22 potential adversary. I do know that there is an ongoing effort -- and I know at
23 least internally, because Region I has been participating in this -- an internal
24 working group to look at some of the lessons learned from the most current
25 version of the significance determination process.

1 And I know that this issue of safeguards information and, you know,
2 the potential value it might provide to an adversary is one that I think is being
3 looked at. But maybe -- I know Trish Holahan or Barry Westrich [spelled
4 phonetically] are in the audience -- if they have a comment on this? Trish
5 Holahan, who is the director of Division of Security Operations in NSIR.

6 MS. HOLAHAN: Yeah. Trish Holahan. At -- Bill is absolutely
7 correct. We're looking at the STP and we're looking at all the findings. And then
8 we're going to take what findings we have and then assess them and it's a work
9 in progress with the regions. So, we're working on it.

10 MR. DEAN: Okay, don't go away, Trish. I might have a --

11 [laughter]

12 MS. HOLAHAN: Shucks.

13 [laughter]

14 MR. DEAN: The next question is are there any plans to make the
15 security significance determination process and inspection procedures publicly
16 available? And, I mean, that's a good question. Just from a historical
17 perspective, one of my prior jobs in the NRC was involved in the development
18 and initial implementation of the Reactor Oversight Process, and of course, those
19 of you who have been around long enough to remember that -- security was an
20 integrated part, the seventh cornerstone as you will -- of the Reactor Oversight
21 Process. And I think there was a lot of openness in terms of security issues and
22 security findings and procedures, but, you know, in the post-9/11 environment,
23 the agency opted to be controlling that information a little more tightly. I don't
24 know, Trish, if you have any more information on that, in terms of where we might
25 be going.

1 MS. HOLAHAN: Well, we're working with NRR on a reassessment
2 process to more closely align these security findings and make them put them in
3 the assessment process, the same way as safety findings go.

4 MR. DEAN: Okay. And there have been -- I mean, this is actually a
5 policy issue with the Commission --

6 MS. HOLAHAN: Yes. Yes. And --

7 MR. DEAN: So, it will be something we'd have to get the
8 Commission to --

9 MS. HOLAHAN: Yeah --

10 MR. DEAN: You know.

11 MS. HOLAHAN: Yeah, it's going in a paper -- going up in May --
12 time frame, Fred? Yeah.

13 MR. DEAN: That was a definitive head nod from Fred Brown
14 [spelled phonetically]. Yes, okay. Okay. Good. Thanks, Trish. Let's see --

15 MS. HOLAHAN: Can I sit down now?

16 MR. DEAN: Well, yeah. Go ahead --

17 [laughter]

18 -- I'll call you back if I need you. Let's see; at one time there was an
19 issue with SUNSI [spelled phonetically] for license renewal applications. Has this
20 been resolved? Are there other areas where protection of SUNSI is an issue?

21 SUNSI, which stands for the security related un -- whatever, nuclear
22 sensitive information. Unclassified Nuclear Sensitive Information. Let me, I
23 guess let me share, maybe -- I don't know, Eric, or Bruce or somebody that's on
24 license renewal could address that. But there is a executive order that was
25 recently issued by the president, that will impact what the NRC calls the SUNSI

1 information. And there's an effort government-wide to try and take the hundreds
2 of various different sensitive information programs that don't reach the level of,
3 you know, confidential, secret, top secret, classified type information, and really
4 call them just one type of information.

5 And so, our SUNSI program will have to be modified to be
6 consistent with that executive order once the guidance comes out from the
7 federal government on that. So that will be a change that will be coming over the
8 next couple of years. But I don't know if anybody from the NRR organization
9 would be able to answer that question. We may have to table that one and
10 respond to that as part of the overall responses we develop for the program as a
11 whole. So I don't see anybody from NRR stepping up. So okay, I apologize for
12 not being able to answer that question. Okay. Any other questions from the
13 floor? Excellent. Thank you very much.

14 MR. VIGILIO: Thank you, Bill.

15 [applause]

16 MR. MCCREE: Good afternoon. I'd like to begin with a yes and a
17 no. Yes, I'm the administrator for Region II. And no, I'm not Luis Reyes.

18 [laughter]

19 We had the opportunity, almost two weeks ago, to celebrate with
20 Luis his retirement and thank him for a long and distinguished career. And we're
21 certainly going to miss him here at the NRC. As this is my first Regulatory
22 Information Conference as regional administrator, I'm taking a lot of notes
23 because I plan to do some lessons learned. One of the lessons that I just
24 learned and wrote down is, "Never follow Bill Dean on the program because he
25 will take more than his allotted time."

1 [laughter]

2 With that in mind, I'm going to move pretty quickly because of the
3 schedule. And I also recognize I'm the only thing standing between you and
4 happy hour. But I want to open up or stimulate some comments and questions
5 on a subject that we've talked about quite extensively over the last year, so -- and
6 it has to do with operating crew performance. I think we all agree that the
7 performance of operating crews during normal, transient, and post-event
8 operations plays an extremely important role in maintaining the overall plant
9 safety. And that performance can be shaped by a number of factors, including
10 stress, training, the experience level of operators, the complexity of the event that
11 they're dealing with, the quality of the procedures, and things such as that.

12 As most of you know -- about a year ago, in fact -- it was two weeks
13 after last year's Regulatory Information Conference, a fire and reactor trip event
14 had occurred at the H.B. Robinson Nuclear Plant. Many of the factors that I just
15 mentioned were evidence in the response of the operating crew. And let me give
16 you a brief summary, a brief overview of the event. A fault on a 4.16 KV [spelled
17 phonetically] electrical cable led to a fire, which damaged the surrounding
18 equipment and caused a reactor trip. The breaker that was designed to mitigate
19 this fault did not operate due to a long-standing problem that had not been
20 corrected.

21 Crew supervision did not exercise effective oversight of the plant's
22 status and the crew performance or site resources and as a result, operators
23 failed to properly monitor key reactor parameters following the trip. And they
24 failed to recognize the magnitude of the cool down and corresponding
25 decreasing reactical [spelled phonetically] and system temperature, pressure,

1 and volume control tank level. An equipment malfunction in the charging system,
2 which disabled the automatic suction source swap over, and the unexpected
3 isolation of the component cooling water system isolation valve led to the loss of
4 the cooling flow to the reactical pump seals [spelled phonetically] and the thermal
5 barrier heat exchanger.

6 However, operators did not recognize the loss of charging flow to
7 the reactical pump seal, nor did they anticipate the isolation of the component
8 cooling water system valve. The incorrect position of this valve was not
9 recognized for a long period of time, due in part to operator training -- including
10 simulator training -- which failed to accurately model the response to the valve to
11 a temporary loss of power.

12 Finally, contrary to plant procedures and despite the presence of an
13 enunciator that indicated the presence of a fault on the bus, approximately four
14 hours after the first fire, operators re-energized the bus damaged by the first fire.
15 And this action caused another electrical fault and fire that resulted in significant
16 damage to plant equipment. So clearly, operator errors during and soon after the
17 fire and reactor trip at Robinson significantly contributed to the event being more
18 complicated than it would have been otherwise. The NRC Augmented Inspection
19 Team as well as follow up inspections have revealed several insights about crew
20 operating readiness at Robinson.

21 The plant had experienced few operational transients, certainly
22 none that challenged operators to the extent that this event had, or required
23 specialized training. The emergency operating procedures at Robinson are
24 knowledge-based, which places a premium on the experience of operators.
25 However, our review of the staff crew composition for each shift at Robinson,

1 from the fall of 2009 until the event in March of 2010, revealed a notable decline
2 in the experience level of operators. No training scenarios as complex as the
3 event that occurred in March had ever been presented to the licensed operators
4 at Robinson so, simulator fidelity, plant procedures, operating crew readiness
5 were never challenged to the extent that they were on March 28.

6 In response to these insights, the NRC has provided additional
7 guidance in the form of an operational experience smart sample to our resident
8 inspectors so that they have better guidance on how they review licensed
9 operator exams and training conducted on plant simulators. The purpose of this
10 guidance is to help residents to select licensee simulator training scenarios that
11 provide better insights into how operators respond to complex transients or
12 reactor trips. The smart sample was issued fully recognizing that NRC currently
13 has no regulatory requirements that specify the quantity or the content of
14 simulator training for licensed operator requalification. Instead, as part of a
15 systems or systematic approach to training-based program, licensees are
16 expected to develop training programs that adequately assess operator and
17 operating crew readiness.

18 In addition, although operating -- excuse me, although complex
19 training scenarios, that is those that include multiple concurrent failures or
20 distractions, may not always have a high plant safety consequence, they may
21 allow licensees to identify weaknesses and crew competencies, procedures,
22 operating strategies, and training.

23 In addition, the NRC is also considering a revision to the
24 requalification inspection procedure -- that's Inspection Procedure 71111.11 -- to
25 place additional emphasis on our assessment of licensed operator performance.

1 In addition to assessing performance during re-qual exams, scenarios in the
2 plant, we're looking at ways to better assess licensed operator performance in
3 the control room.

4 One area that we're considering is to include an operator license
5 examiner observations of operating crew performance in the main control room
6 during the biennial re-qual inspection, rather than the more limited observations
7 that they currently do -- that are currently led by resident inspectors. Another
8 area that we're considering is using this inspection to gain better insights into
9 how licensed operator requalification training program is used to correct
10 performance problems and improve overall operator performance. A third
11 approach that we're considering is to use the Problem Identification and
12 Resolution Inspection to evaluate training-related issues and discern how well
13 training is subsequently used to improve operating crew performance. Finally,
14 we're also considering the merits of increasing our focus on how licensees apply
15 the systems approach to training process, such as trainee remediation, the
16 quality of examinations, examination security, and the use of operator experience
17 feedback to training, to ensure that the process is being followed and that it is
18 resulting in licensed operator performance improvements.

19 Finally, regarding our interface with INPO, we are aware of the
20 concerns that the industry has about degradation in industry fundamentals that
21 were demonstrated in the Robinson event and other events highlighted in INPO
22 SOER2010-2. And it shouldn't surprise you to note that because of our shared
23 concerns in this area, NRC and INPO have coordinated to ensure that the
24 initiatives that we're considering do not conflict with those of INPO. We also
25 understand that INPO is currently reviewing its method of assessing operator

1 performance and may initiate changes of its own to better evaluate the
2 performance of licensed operators.

3 Before I open for question and answer, I wanted to transition by
4 closing my remarks with this photo. It's over 100 years old; you may recognize it.
5 It's a photo of the first manned flight at Kitty Hawk. Wilbur Wright indicated after
6 striving with his brother to design a wing that would support man flight, he said
7 the soaring problem is apparently not so much one of better wings as of better
8 operators, of course giving focus to the importance of operator performance. But
9 after recently seeing the movie "The King's Speech," I believe a more timely
10 analogy would be an emotional scene in the movie where Colin Firth -- who plays
11 the character King George VI -- is having a labored discussion with his speech
12 therapist, Lionel Logue -- played by Geoffrey Rush -- with great difficulty because
13 of his stuttering problem, Colin Firth shouts, "I have something to say!"

14 Well, I think the event at Robinson and other events, including the
15 recent event at Millstone, is telling us something about the performance of
16 licensed operators, telling us something about crew readiness. I think the
17 challenge we have is to understand what these events are saying and then
18 deciding what we need to do about it. So with that, I'd like to ask Jim Scarola,
19 the chief nuclear officer for Progress Energy, to share some thoughts on this
20 subject.

21 MR. SCAROLA: Thank you, Victor. When Victor first spoke to me
22 about speaking at this conference, I thought it was a real honor. And then I
23 realized, when I was sitting up in the front row here and watching my colleagues
24 come up and speak, that maybe I had mistaken that --

25 [laughter]

1 -- so, I got refreshed a little bit about the importance of OE, Elmo,
2 as you had difficulties here with the changing of the slides, and when Mark
3 asked, "Hey, Elmo, what button do I touch?" And --

4 MALE SPEAKER: [inaudible] what are you touching [unintelligible]
5 --

6 [laughter]

7 MR. SCAROLA: I recognize why I was here. It was to transfer OE.
8 So, let me come back to the honor of sharing that OE with you. Certainly, the
9 Robinson event was a very difficult event for us. And it was a very serious event
10 for us and I would refer to it, for Progress Energy, as a landmark event for us.
11 And if I add any value today, it's by maybe helping to make it a landmark event
12 for others in the industry, because it did reveal a number of things -- as Victor
13 pointed out -- about operator crew performance. And as we work through that
14 and we ask ourselves, "Hey, why did we did not detect some of the behavior
15 deficiencies before the events allowed them to be revealed?"

16 And there are a number of lessons there for us. And some of that
17 was associated with the way in which we assess that dynamic that is so critical
18 and that balance between knowledge, experience, and rule base that we have in
19 our procedures. And we run many scenarios, as we all do through the industry,
20 of our operating crews. And we have very specific objectives and we exercise all
21 our normal, our abnormal procedures, and our emergency procedures. But the
22 event on March 28 brought in a different emphasis into the dynamics of that
23 team, and that crew, and that leadership that we had clearly not exercised
24 adequately in the past. Or if we had exercised it, we had clearly not evaluated it.
25 And as we look through that, it really brings another dimension and we have

1 specifically gone to all our sites and our operator programs and redesigned some
2 scenarios. And they are not all crash and burn scenarios, but they are complex
3 scenarios that test the ability of the shift commander to communicate very clear
4 expectations, to be faced with changing priorities and the opportunity to
5 adequately assign resources and the communications that has to take place
6 between all members of that crew when one member sees something that may
7 not be obvious to others, or a field operator has information that may be vital.

8 And we found ourselves designing a crew scenario that really
9 brought those dimensions of crew dynamics and behavior to a different level of
10 performance. So I think there is some learning out of this event that is operating
11 experience for the industry. And as I recognize the invitation and the honor of
12 that -- that Victor has given me -- to come here, I also have had the opportunity
13 through many interfaces with INPO, to try to share this information and
14 perspective. So I think there is value here for others and we are certainly
15 supportive. And I know that the events that started last year and led to Jim Ellis
16 [spelled phonetically] issuing a letter to all of the CEOs in our industry, that
17 recently we have -- as an industry and through INPO -- released some additional
18 information and videos to help bring those events to life and those lessons
19 learned.

20 So, on behalf of Progress Energy, I'll be happy to share any
21 additional detail with anybody that would value it. So thank you, Victor.

22 MR. MCCREE: Thanks, Jim.

23 MALE SPEAKER: Any questions?

24 MR. MCCREE: Are there any questions on this subject? Okay?

25 Thank you very --

1 [applause]

2 MALE SPEAKER: There were a number of cards that came up
3 from the audience that went to other to speakers. So in order from my left to
4 right -- Bill, you have a couple cards?

5 MR. DEAN: Yeah. There's a question here: could NRC host or
6 work with FBI to have a national database of nuclear workers/contractors to
7 ensure workers of questionable affiliation are not allowed to work in nuclear
8 power plants?

9 This obviously -- question stems from last year. We had an issue
10 with an individual named Sharif Mobley, who was a terrorist in Yemen, shot up a
11 hospital in Yemen and was recognized as that -- at some point, and as people
12 checked his background that he had worked at nuclear power plants in the
13 northeast New Jersey-Pennsylvania area. And it certainly raised a lot of
14 questions about, "Gee, had this person been radicalized while he was a nuclear
15 plant operator or a nuclear plant worker?" and, "Does our access system allow us
16 to screen individuals for this?"

17 And I would offer that there already exists multiple databases that
18 get accessed and utilized before an individual's granted unescorted access to a
19 nuclear power facility. Fingerprints are processed through various systems that
20 the FBI has, before we would allow a licensee grant [spelled phonetically]
21 unescorted access. And additionally, industry maintains an access database of
22 individuals such that we're able to keep track of individuals that might have been
23 identified as having something in their background or in their performance that
24 we would deem not appropriate for them to have unescorted access at a nuclear
25 facility.

1 So, there already is existing, a substantial amount of information
2 out there that is accessed. We did take the events -- the Sharif Mobley event --
3 and take an opportunity to look at both our system and the system that industry
4 maintains, and we did put in place some things to strengthen the utilization of
5 those systems to close up any potential gaps that might have existed. But I feel
6 pretty confident and pretty comfortable that between what the NRC does and
7 engages with the FBI, and what industry maintains, that we have a pretty solid
8 access database system for individuals. So.

9 MR. SATORIUS: Yeah, I had a question: who is advocating for
10 high level used fuel storage and if the focus is now safety and security, this
11 impacts both -- I'm going to take the first question and my interpretation of that
12 question -- and I may be wrong -- but -- is that I had indicated in my presentation,
13 that I know that all of the regions were starting to get busy because licensees
14 were busy constructing paths and undertaking cask campaigns, which is true.

15 No one's really advocating anything; it's an operational necessity
16 that fuel -- you can only put so much fuel in this wet [spelled phonetically] spent
17 fuel pool until it's time to either not -- if you can't put in any more, then you can't
18 operate the plant anymore. So, when the whole business with high level waste,
19 which is being decided downtown -- is you have higher pay grades, certainly than
20 myself, because Yucca was not -- or a repository for high level waste -- was not
21 finished as was advertised at one time in 1998. Plants and fuel pools started
22 filling up. So in order for them to continue to operate, they had to come up with a
23 different way of storing fuel. So it wasn't really that there was an advocacy
24 associated with storing fuel in casks. It was an operational necessity that was
25 borne out of having to do something with the fuel. And on these systems -- the

1 paths, the transfer casks, the storage casks, the canisters -- there's several
2 different vendors that make these systems. They're all -- have gone through a
3 certification process with the NRC so that if the licensee loads the cask or the
4 canister in a manner consistent with the safety evaluation report and then
5 transports it, stores it, and maintains it stored, consistent with that report, it can
6 be stored safely and securely. Either -- whether it's an integral part of a protected
7 area's footprint under the Part 50 licensee or whether it's a Part 72 licensee --
8 license, which is -- would be separate.

9 So, these are -- you know, we have reasonable assurances that
10 fuel can be stored in these casks for certainly the amount of time that they're
11 licensed for, and more than likely probably more than that at some point in time.

12 So I took a stab at answering that question on the advocacy and I
13 think I put a pretty good perspective on safety and security and how these casks
14 are an integral part of our focus in those areas. I don't know if any of my
15 colleagues have anything to add on that.

16 MALE SPEAKER: Okay.

17 MALE SPEAKER: Okay. Elmo?

18 MR. COLLINS: This question is in regard to operational data. It's a
19 comment and then a question. The comment is: we miss the AOED reports and
20 details. The question is: would NRC consider having a searchable database --
21 and I might need some help from -- Fred's already walked out, so Bruce -- a
22 searchable database -- Web-based, to be able to sort, sift, et cetera by event
23 type, reactor type, et cetera. LARs should be linked, so we can find details and
24 reports. Using ADAMs [spelled phonetically] is not sufficient, and current NRC
25 Web page is not adequate. The concept that's thought about behind the

1 question is Web-based searchable for different events: fires, LARs, et cetera,
2 related reports with data ranges, et cetera, to be able to download to an Excel
3 spreadsheet. So, I guess the question is: would we consider it? Bruce is going
4 to help me with that.

5 MALE SPEAKER: Well, I think, like many databases it's up to who
6 really wants to use it and who wants to pay for it? So...

7 [laughter]

8 We will take it under -- you know, it's a good suggestion.

9 MR. COLLINS: Okay, good. All right. Thank you.

10 MR. MCCREE: [inaudible] Marty. Yeah, there we go.

11 Yeah. I wasn't about to ask a question. I was about to answer one,
12 or attempt to. The question is: Tensia [spelled phonetically] [unintelligible] Part
13 26 was implemented in 2009, since there was an uptick in events in 2010 due to
14 or made worse due to human performance, does the NRC see any correlation
15 between the fatigue rule and an increase in human performance events?

16 And the short answer is no. And there is information that is
17 probably worthy of providing -- I think I may see Fred Brown over there --
18 because there are a couple of human performance aspects that we have seen, at
19 least in 2010, where there is -- for those findings that we attributed a cross-
20 cutting aspect to, there was information as we did our roll-up from 2010 that was
21 insightful. I just can't recall exactly what those components were. And if Fred is
22 here and he could provide that, it would be useful; otherwise, we can provide that
23 information on the Web site after the RIC.

24 MR. VIGILIO: I have one last chance for any questions from the
25 audience for any of us. Okay, absent [spelled phonetically] questions. This

1 brings to closure our session on operational performance and trends. I'd like to
2 thank the audience, particularly those of you who asked questions and I'd
3 especially like to thank the industry leaders here with us today who provided
4 insights in each of these four areas. In closing the session, if there's anything
5 that you take away from this, I would like you to take away the notion that we
6 collectively -- and I mean the NRC and the industry that we regulate -- can never
7 take safety for granted. And with that, I'd like to thank our panelists and bring this
8 session to a close.

9 [applause]

10 Thank you all.

11 [Whereupon, the proceedings were concluded]